



# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

|  |  |                        |                 |
|--|--|------------------------|-----------------|
|  |  | Application Number     | 10/676,601      |
|  |  | Filing Date            | October 1, 2003 |
|  |  | First Named Inventor   | XU              |
|  |  | Group Art Unit         | NA              |
|  |  | Examiner Name          | NA              |
| Total Number of Pages in This Submission |  | Attorney Docket Number |                 |
|  |  | 10013.0001US           |                 |

## ENCLOSURES (check all that apply)

|  |   |   |
|--|---|---|
| <input type="checkbox"/> Fee Transmittal Form<br>(in duplicate)                    | <input type="checkbox"/> Assignment Papers<br>(for an Application)                            | <input type="checkbox"/> After Allowance Communication<br>to Group                            |
| <input type="checkbox"/> Fee Attached  | <input type="checkbox"/> Drawing(s)   | <input type="checkbox"/> Appeal Communication to Board of Appeals and<br>Interferences        |
| <input type="checkbox"/> Amendment/Reply   | <input type="checkbox"/> Licensing-related Papers   | <input type="checkbox"/> Appeal Communication to Group<br>(Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final   | <input type="checkbox"/> Petition   | <input type="checkbox"/> Proprietary Information  |
| <input type="checkbox"/> Affidavits/declaration(s)                                 | <input type="checkbox"/> Petition to Convert to a<br>Provisional Application                  | <input type="checkbox"/> Status Letter  |
| <input type="checkbox"/> Extension of Time Request                                 | <input type="checkbox"/> Power of Attorney, Revocation<br>Change of Correspondence<br>Address | <input checked="" type="checkbox"/> Other Enclosure(s)<br>(please identify below)             |
| <input type="checkbox"/> Express Abandonment<br>Request                            | <input type="checkbox"/> Terminal Disclaimer  | 1. Self-addressed stamped postcard.   |
| <input checked="" type="checkbox"/> Information Disclosure<br>Statement            | <input type="checkbox"/> Request for Refund   | 2. Identified references.   |
| <input type="checkbox"/> Certified Copy of Priority<br>Document(s)                 | <input type="checkbox"/> CD, Number of<br>CD(s) _____   |   |
| <input type="checkbox"/> Response to Missing Parts/<br>Incomplete Application      |   |   |
| <input type="checkbox"/> Response to Missing<br>Parts under 37 CFR<br>1.52 or 1.53 |   |   |
| Remarks  |   |   |

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

|                               |  |
|-------------------------------|--|
| Firm<br>or<br>Individual Name | Greg S. Hollrigel<br>Registration No. 45,374 |
| Signature                     |  |
| Date                          | December 5, 2003                             |

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO, or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

|                       |                   |      |                  |
|-----------------------|-------------------|------|------------------|
| Typed or printed name | Greg S. Hollrigel |      |                  |
| Signature             |                   | Date | December 5, 2003 |



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/676,601  
Applicant : XU et al.  
Filed : October 1, 2003  
Title : MICRO-PUMP

Confirmation No.

TC/A.U. : NA  
Examiner : NA

Docket No. : 10013.0001US  
Customer No. : 31495

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

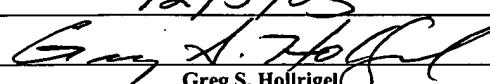
**CERTIFICATE OF MAILING**

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Date:

12/5/03

By:

  
Greg S. Hollrigel

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. 1.97(b)(1)**

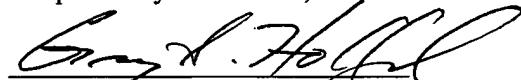
Dear Sir:

Applicant wishes to call to the attention of the Examiner the documents cited on the accompanying Form PTO-1449. Copies of these references are enclosed herewith. This communication is being submitted under 37 C.F.R 1.97(b)(1). No fee is due regarding this communication.

No concession is made that these documents are prior art, and applicant expressly reserves the right to antedate the documents as may be appropriate. Applicant requests that each of these documents be made of record in the above-identified application.

Date: 12/5/03

Respectfully submitted,



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| Form PTO-1449<br>DEC 08 2003<br><b>INFORMATION DISCLOSURE CITATION</b><br>IN AN APPLICATION<br>(Use separate sheets if necessary)   |                 |   | Docket No.: 10013.0001US      |       | Application No.: 10/676,601  |                            |                    |  |
|---|-----------------|---|-------------------------------|-------|------------------------------|----------------------------|--------------------|--|
|   |                 |   | Applicant: XU et al.          |       | Filing Date: October 1, 2003 |                            | Group Art Unit: NA |  |
|   |                 |   | <b>U. S. PATENT DOCUMENTS</b> |       |                              |                            |                    |  |
| EXAMINER INITIAL  | DOCUMENT NUMBER | DATE  | NAME                          | CLASS | SUBCLASS                     | FILING DATE IF APPROPRIATE |                    |  |
|   | 5,499,909       | 3/19/96   | Yamada et al.                 | 417   | 384                          |                            |                    |  |
|   | 5,759,014       | 6/2/98  | Van Lintel                    | 417   | 413.3                        |                            |                    |  |
|   | 6,390,791       | 5/21/02   | Maillefer et al.              | 417   | 413.3                        |                            |                    |  |
|   | 6,408,878       | 6/25/02   | Unger et al.                  | 137   | 597                          |                            |                    |  |
|   | 6,520,753       | 2/18/03   | Grosjean et al.               | 417   | 379                          |                            |                    |  |
|   | 2002/0081866 A1 | 6/27/02   | Choi et al.                   | 438   | 800                          |                            |                    |  |
| <b>FOREIGN PATENT DOCUMENTS</b>   |                 |   |                               |       |                              |                            |                    |  |
|   | DOCUMENT NUMBER | DATE  | COUNTRY                       | CLASS | SUBCLASS                     | TRANSLATION                |                    |  |
|   |                 |   |                               |       |                              | YES                        | NO                 |  |
|   | 02/43615        | 6/6/02  | WO                            |       |                              |                            |                    |  |
| <b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>   |                 |   |                               |       |                              |                            |                    |  |
|   | AA              | Maillefer, D. et al., "A high-performance silicon micropump for disposable drug delivery systems", The thirteenth IEEE International Micro Electro Mechanical Systems (MEMS-2000 Conference, Miyazaki, Japan, 413-417 |                               |       |                              |                            |                    |  |
|   | AB              | Khoo, M. et al., "A novel micromachined magnetic membrane microfluid pump", The 22nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society. Chicago, IL, 2000, 1-4.                 |                               |       |                              |                            |                    |  |
|   | AC              | Linnemann, R. et al., "A self-priming and bubble-tolerant piezoelectric silicon micropump for liquids and gases", The 11th annual international workshop on MEMS, 1998 Heidelberg Germany, 532-537.                   |                               |       |                              |                            |                    |  |
|   | AD              | Kamper, K.P. et al., "A self-filling low-cost membrane micropump", The 11th annual international workshop on MEMS, 1998 Heidelberg Germany, 432-437.  |                               |       |                              |                            |                    |  |
|   | AE              | Shinohara, J. et al., "A high pressure-resistance micropump using active and normally-closed valves", Thirteenth IEEE International Micro Electro Mechanical Systems (MEMS-2000) Conference, Miyazaki, Japan, 2000.   |                               |       |                              |                            |                    |  |
|   | AF              | Grosjean, C. et al., "A thermopneumatic peristaltic micropump", Technical Digest of Transducers '99, Sendai, Japan.   |                               |       |                              |                            |                    |  |
|   | AG              | Maillefer, D. et al., "A high-performance silicon micropump for an implantable drug delivery system", The 1999 IEEE International Micro Electro Mechanical Systems (MEMS-1999) Conference. Orlando, FL, 1999.         |                               |       |                              |                            |                    |  |
|   | AH              |   |                               |       |                              |                            |                    |  |
| EXAMINER  |                 |   | DATE CONSIDERED               |       |                              |                            |                    |  |
| EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant. |                 |   |                               |       |                              |                            |                    |  |